



Subject to change without notice!  
Rev. 0701

## Flat sensor MESEP®

# RE

### Application

These flat sensors are detectors for all types of metal for the use in conveyor belts and chutes. Foils or other roll goods can be detected on metallic contamination. Thus the sensors serve for quality assurance as well as for machine protection. Beyond that the flat detectors are also appropriate for applications of the process control e.g. for object counting or for completeness check.

### Function & handling

The sensor has a dynamic working principle which means it only detects moving metallic pieces in the sensor range. If a non-moving metal piece is situated in the detection range, it does not excite a signal and therefore is not detected. The operation of the sensor requires a control unit. This realises the voltage supply for the sensors and allows the adjustment of all parameters. The detailed functioning and handling depends on the control unit.

### Arrangement with several sensors

Each sensor of the RE series is available with two different frequencies. Thus it is possible to eliminate interferences between two close-by sensor. Several sensors can be arranged directly on top of or next to each other. Sensors with different frequencies can be arranged next to each other with no need for a lateral distance. If the sensors are arranged on top of



each other it is compulsory to keep a distance of minimum 20 mm! Between sensors with the same frequency a minimum distance of 1 m has to be kept!

### Specific characteristics

- compact dimensions - installation height 23mm
- no metal-free areas necessary
- stable and shock proofed aluminium housing
- easy mounting
- separate control electronics with freely adjustable functions
- protection class IP67
- sensitivity adjustable via control electronics

Flat sensor MESEP® RE



Type	MESEP® RE 100	MESEP® RE 350	
<b>Mechanical data</b>			
Dimensions	L x B x H: 100 x 130 x 40 mm	L x B x H: 350 x 194 x 23 mm	
Housing	stainless steel	aluminium	
Active surface	polyurethane		
<b>Electrical data</b>			
Supply voltage	15 VDC		
Output	analog voltage output		
Electrical connection	PVC - cable; 2 m		
<b>Conditions of use</b>			
Storage temperature	-10°C .. 70°C		
Operating temperature	-10°C .. 70°C		
Protection class	IP67		
Speed <sup>1</sup>	1 - 120 m/min		
<b>Order information</b>			
Frequency group 1	08317690011	08317690000	
Frequency group 2	08317690012	08317690030	
Control unit (10 fold)	standard	for top hat rail	with reverting contactor
	08349005000	08349005001	08349005002
Control unit (1 fold)	230VAC/24VDC → 08349005010	115VAC/24VDC → 08349005012	
<b>Sensitivity</b>			
	Maximum distance between the sensor and the test piece.		
Fe-plate 220 x 330 mm	150 mm		
Fe-plate 30 x 30 mm	70 mm		
Fe-plate 12 x 12 mm	50 mm		
Nut M6	40 mm		
Washer M4	24 mm		
Fe-ball Ø 4,0 mm	18 mm		
Fe-ball Ø 3,5 mm	15 mm		
Fe-ball Ø 3,0 mm	12 mm		
Fe-ball Ø 2,0mm	6 mm		



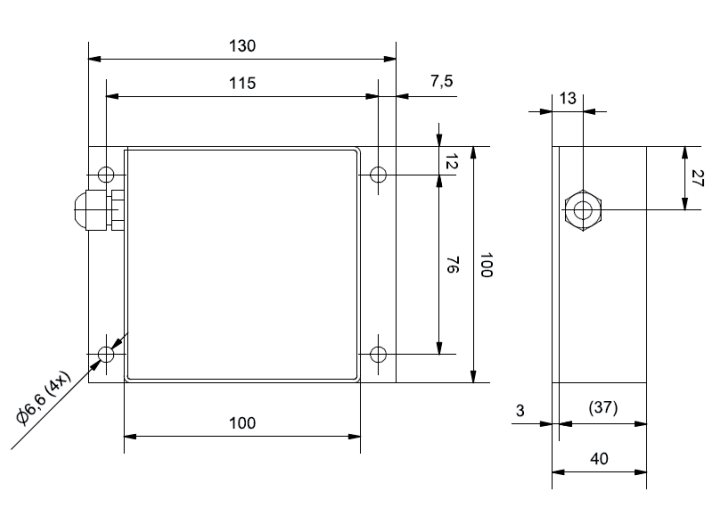
## Mounting instructions

The sensors can be mounted shielded in metal.

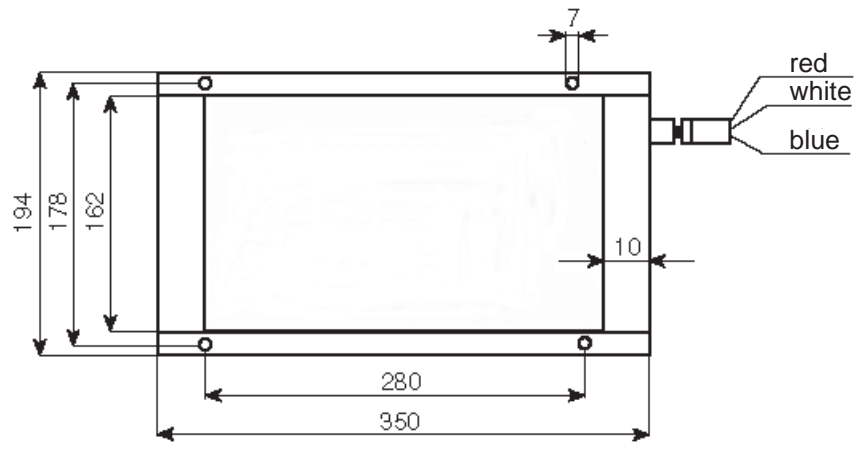
That means:

Metal can approximate the housing sideways and from below. But metal must not protrude on the sensor face! Shielded mounting does not have influence on the detection performance.

## Dimensions MESEP® RE 100



## Dimensions MESEP® RE 350



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